

1419154

https://www.phoenixcontact.com/us/products/1419154

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Device connector rear mounting, PROFINET CAT5 (100 Mbps) CAT5 (100 Mbps), 4-position, PVC halogen-free, green RAL 6018, shielded, Socket, straight, M12-SPEEDCON, coding: D, on free cable end, Rear mounting, Cable connection, cable length: 0.5 m, PROFINET, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239233

Your advantages

- · Preassembled with cables in various standard lengths for immediate use
- · Customer-specific assemblies and cable lengths can be supplied
- · Sealed on the cable side for optimum tightness of seal
- · Cable designs for all common networks and fieldbuses
- · For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1419154
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGI
Catalog page	Page 317 (PC-2011)
GTIN	4046356541008
Weight per piece (including packing)	65.5 g
Weight per piece (excluding packing)	65.5 g
Customs tariff number	85444290
Country of origin	DE



1419154

https://www.phoenixcontact.com/us/products/1419154

Technical data

Notes

General	Contact connection method: Crimp connection		
Safety note			
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.		
	 WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible. 		
	WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.		
	 The products are suitable for applications in plant, controller, and electrical device engineering. 		
	 When operating the connectors in outdoor applications, they must be separately protected against environmental influences. 		
	 Assembled products may not be manipulated or improperly opened. 		
	 Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products). 		
	 When using the product in direct connection with third-party manufacturers, the user is responsible. 		
	 For operating voltages > 50 V AC, conductive connector housings must be grounded 		
	 Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards. 		
	Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product		
	Only use tools recommended by Phoenix Contact		
	 Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products 		
	 Ensure that the protective or functional ground has been properly connected. 		
	 VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector 		
	The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to		



1419154

https://www.phoenixcontact.com/us/products/1419154

	warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).
oduct properties	
Product type	Data cable preassembled
Sensor type	PROFINET
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	D
Thread type	M12
Insulation characteristics	
Overvoltage category	II.
Degree of pollution	3
terfaces	
Bus system	PROFINET
Signal type/category	PROFINET CAT5 (IEC 11801:2002), 100 Mbps
ectrical properties	
Rated surge voltage	2.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	250 V
Nominal current I _N	4 A (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed)
Transmission medium	Copper
Transmission characteristics (category)	CAT5
echanical properties Mechanical data	
Insertion/withdrawal cycles	≥ 100
aterial specifications	
Flammability rating according to UL 94	V0
Seal material	FKM
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Brass, nickel-plated
Outer sheath, material	PVC
onnection data	
Connection technology	
Connection method	Cable connection



1419154

https://www.phoenixcontact.com/us/products/1419154

Conductor connection

Contact connection type	Socket
Connection method	Cable connection
Tightening torque	2 Nm 3 Nm (Installation-side)

Connector

Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	D

Connection 2

Head design	free cable end

Cable/line

	0.5 m
--	-------

Sercos III [93K]

Dimensional drawing



Cable weight	68 kg/km
UL AWM Style	21694 (60 °C / 600 V)
Number of positions	4
Shielded	yes
Cable type	Sercos III [93K]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal runtime	5.3 ns/m
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm²
Wire diameter incl. insulation	approx. 1.55 mm
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	signal red RAL 3020
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE



1419154

https://www.phoenixcontact.com/us/products/1419154

Single wire, color	white, yellow, blue, orange
Thickness, outer sheath	approx. 0.90 mm
Type of pair shielding	Aluminum-lined polyester foil
Overall twist	Star quad
Max. conductor resistance	≤ 120 Ω/km
Insulation resistance	≥ 0.5 GΩ*km
Coupling resistance	≤ 20.00 mΩ/m (at 10 Hz)
Wave impedance	100 Ω ±15 Ω (at 100 MHz)
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	46 mm
Flame resistance	according to UL 1685 (CSA FT 4)
Resistance to oil	Resistant to oil to a limited extent
Other resistance	UV resistant (According to UL 1581, Section 1200)
Ambient temperature (operation)	-40 °C 70 °C (cable, fixed installation)
	-40 °C 70 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C 60 °C

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65/IP67
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)

Standards and regulations

M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



1419154

https://www.phoenixcontact.com/us/products/1419154

Classifications

ECLASS

	ECLASS-11.0	27440102			
	ECLASS-12.0	27440116			
	ECLASS-13.0	27440116			
ETIM					
	ETIM 9.0	EC002635			
UNSPSC					
	UNSPSC 21.0	39121400			



1419154

https://www.phoenixcontact.com/us/products/1419154

Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

Phoenix Contact 2024 © - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com